

BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL

Chairman

JIM IRVIN

Commissioner

MARC SPITZER

Commissioner

IN THE MATTER OF THE GENERIC)	DOCKET NO. E-00000A-02-0051
PROCEEDINGS CONCERNING ELECTRIC)	
<u>RESTRUCTURING ISSUES.</u>)	
IN THE MATTER OF ARIZONA PUBLIC)	DOCKET NO. E-01345A-01-0822
SERVICE COMPANY'S REQUEST FOR A)	
VARIANCE OF CERTAIN REQUIREMENTS OF)	
<u>A.A.C. R14-2-1606.</u>)	
IN THE MATTER OF THE GENERIC)	DOCKET NO. E-00000A-01-0630
PROCEEDINGS CONCERNING THE ARIZONA)	
INDEPENDENT SCHEDULING)	
<u>ADMINISTRATOR.</u>)	
IN THE MATTER OF TUCSON ELECTRIC)	DOCKET NO. E-01933A-02-0069
POWER COMPANY'S APPLICATION FOR A)	
VARIANCE OF CERTAIN ELECTRIC)	
<u>COMPETITION RULES COMPLIANCE DATES.)</u>	

TRACK B REBUTTAL TESTIMONY

OF

JERRY D. SMITH

ELECTRIC UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

November 18, 2002

SUMMARY
TRACK B REBUTTAL TESTIMONY
JERRY D. SMITH
GENERIC ELECTRIC RESTRUCTURING DOCKET
DOCKET NO. E-00000A-02-0051, ET. AL.

Mr. Smith's Track B rebuttal testimony identifies discrepancies and omission of RMR capacity and energy figures in the APS and TEP Track B needs assessment filings. In addition, he restates Staff's position regarding when RMR capacity and energy are legitimately contestable. Mr. Smith's testimony concludes with a Staff recommendation of including APS and TEP RMR capacity and energy in the contestable load tables of Staff's Track B report. He also recommends that the RMR Study results filed by APS and TEP with the Commission by January 31, 2003, should be used to adjust Staff's recommended contestable load offered in Track B.

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INTRODUCTION

Q. Please state your name and business address.

A. Jerry D. Smith, 1200 West Washington, Phoenix, Arizona 85007.

Q. By whom are you employed and in what capacity?

A. I am employed by the Arizona Corporation Commission ("Commission") as an Electric Utilities Engineer for the Utilities Division.

Q. Please summarize your educational background.

A. I graduated from the University of New Mexico with a Bachelor of Science degree in Electrical Engineering. I received a Masters of Science degree in Electrical Engineering from New Mexico State University majoring in power systems and electric utility management.

Q. Do you hold any special licenses or certificates?

A. I am licensed with the State of Arizona as a Professional Engineer - Electrical.

Q. Have you previously submitted testimony on behalf of Arizona Corporation Commission Staff in Track A and Track B proceedings?

A. Yes, I have. I submitted direct and rebuttal testimony in Track A proceedings and contributed to the Staff Report filed in both the Track A and Track B proceedings.

Q. Did you participate in the Track B workshops?

A. Yes, I attended and participated in each of the Track B workshops.

Q. Are you sponsoring the Track B Staff Report, which was filed on October 25, 2002?

A. Yes, I am one of the three witnesses sponsoring the Track B Staff Report.

PURPOSE OF REBUTTAL TESTIMONY

Q. What is the purpose of your rebuttal testimony in these proceedings?

A. My rebuttal testimony will respond to specific segments of Track B direct testimony provided by Peter M. Ewen, David Hutchens, Dr. Craig Roach, Curtis L. Kebler, and Robert W. Kendall. My rebuttal testimony focuses on the following topics:

1. Local service area transmission import constraints for the Arizona Public Service Company (“APS”) and Tucson Electric Power (“TEP”);
2. Reliability Must-Run (“RMR”) generation requirements associated with the above transmission import constrained areas; and
3. Staff recommended treatment of RMR capacity and energy requirements in the competitive solicitation process.

Q. Please summarize the contents of your rebuttal testimony.

A. My testimony identifies discrepancies and omission of RMR capacity and energy figures in the APS and TEP Track B needs assessment filings. In addition, I restate Staff’s position regarding when RMR capacity and energy are legitimately contestable. My testimony concludes with a Staff recommendation of including APS and TEP RMR capacity and energy in the contestable load tables of Staff’s Track B report. I suggest the RMR Study results filed with the Commission by January 31, 2003, should be used to adjust the recommendation about contestable load offered by Staff in Track B.

LOCAL TRANSMISSION IMPORT CONSTRAINTS

Q. Please describe how transmission constraints impact the “contestable capacity and energy” levels procurable from the competitive wholesale market.

A. Transmission constraints limit what capacity and energy can be delivered from particular generators over particular lines to the intended load. Furthermore, a Reliability Must-Run (RMR) condition exists, for a geographic area, during any period of time that local load exceeds the transmission import capability for that local area. When that occurs, the load

1 serving utility must rely upon local generating units to serve the amount of load that
2 exceeds the local transmission import limit. When determining how much energy and
3 capacity should be procured by competitive solicitation, it is necessary to (i) accurately
4 define the extent of transmission constraints, (ii) determine what hours of the which days
5 the constraints occur, and (iii) what generating units can meet RMR requirements.
6

7 **Q. How is this relevant to this proceeding?**

8 A. In the case of APS, the utility has suggested that only units it owns can meet RMR
9 needs, though the company has agreed to entertain bids for RMR service. The result is
10 the utility claiming that RMR capacity and energy should not be considered contestable
11 when procuring capacity and energy from the competitive wholesale market. This
12 approach has the potential to diminish the benefits to be derived from competitive
13 bidding, and serve to encourage the utility to continue using generating plants within a
14 constrained area, and not looking to meet system needs from cheaper and cleaner sources.
15

16 **Q. APS and TEP filed needs assessments in accordance with the third procedural order**
17 **on Track B issues dated October 9, 2002. Have APS and TEP accurately defined**
18 **their transmission import constraints for their respective local service areas in their**
19 **needs assessments?**

20 A. There are inaccuracies in the transmission import limits reported by APS. Mr. Peter Ewen
21 identifies the APS transmission import limit for metro Phoenix as being 3535 MW from
22 2003 through 2012.¹ This import capacity assumes 600 MW of additional APS
23 transmission import capacity resulting from construction of the Palo Verde to Rudd 500
24 kV line by the summer of 2003. However, Staff confirmed with APS and SRP during the
25 October 18th 2002 Biennial Transmission Assessment workshop that only half of that
26 import capacity addition would actually be realized. Similarly, it was confirmed that APS
27 would share in each 600 MW transmission import capacity increase assumed to result
28

¹ Work Papers, APS Metro Phoenix Reliability Must Run Estimates, Peter M. Ewen, November 4, 2002, page 76.

1 from the addition of the Palo Verde to Southeast Valley 500 kV line in 2006, and the Palo
2 Verde to Table Mesa 500 kV line in 2008. Neither of these two transmission import
3 improvements was acknowledged by Mr. Ewen in his Reliability Must Run Estimates. In
4 addition, Mr. Ewen ignored the transmission import constraints known to exist for APS'
5 Yuma service area.

6
7 Neither transmission import capacity nor RMR capacity and energy calculations were
8 included in TEP's needs assessment filed by David Hutchins on November 4.² Therefore,
9 Staff will use information about transmission import constraints for the Tucson area
10 presented by TEP throughout the electric restructuring proceedings and the Biennial
11 Transmission Assessment workshops. Its transmission import capability is dependent
12 upon the combination and output of local generating units in service.

13
14 **Q. What are the consequences of the local transmission import capacity inaccuracies**
15 **and omissions from the APS and TEP filed needs assessments?**

16 A. In the case of APS, it means the RMR capacity and energy is understated in 2003
17 through 2006 and overstated in later years. In other words, the unmet RMR capacity and
18 energy needs are similarly understated from 2003 to 2006 and overstated in later years. In
19 the case of TEP, it means we have no record of RMR capacity and energy components in
20 their needs assessment.

21
22 **RELIABILITY MUST-RUN GENERATION REQUIREMENTS**

23 **Q. Did Staff include RMR capacity and energy in the contestable capacity and energy**
24 **tables³ of its Track B Staff Report?**

25 A. No, we did not. Staff did not have adequately defined RMR capacity and energy numbers
26 available at the time of the report. Such information still is not available to Staff as stated
27

28

² Track B Needs Assessment and Procurement Proposal, David Hutchins, November 4, 2002.

³ Staff Report on Track B: Competitive Solicitation, October 25, 2002, page 7.

1 earlier in this rebuttal testimony. In fact, that is why Staff took particular steps to include
2 the deliverability qualifications section of our recommended solicitation process.⁴

3
4 **Q. Does Staff support the supposition that RMR capacity and energy should be**
5 **considered contestable for the 2003 competitive solicitation?**

6 A. Staff believes RMR capacity and energy should be considered contestable. Throughout
7 the Track B workshops, Staff has stated conditions under which RMR capacity and
8 energy could be contestable. Dr. Craig Roach has eloquently captured those conditions in
9 his testimony.⁵ RMR capacity and energy could be contestable if: 1) non-utility owned or
10 non-rate based generation units exist locally, 2) remote generation has access to non-APS
11 or non-TEP firm transmission capacity to delivery to the respective local area, or 3)
12 remote generation offers to finance transmission improvements to mitigate the
13 transmission import constraint. While the third condition may not be achievable within
14 the early years of the 2003 solicitation, it may be feasible for the later years.

15
16 **Q. Mr. Curtis L. Kebler expressed concerns about the RMR hours, capacity and**
17 **energy not being known until a decision in the Track B process is rendered.⁶ Does**
18 **Staff share this concern?**

19 A. Yes, we do. However, transmission providers have committed to an RMR Study Plan that
20 will be documented in the 2002 Biennial Transmission Assessment. That commitment
21 includes an agreement to perform RMR Studies for years 2003-2007 to be filed with the
22 Commission in January 2003. The identification of RMR hours, capacity and energy is
23 one of the study requirements. Refinement of the transmission import limitation is also a
24 requirement of that study. The resulting study information will then be available to
25 incorporate in the pre-solicitation activities of the 2003 competitive solicitation process.

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27
28 ⁴ Ibid, pages 15 and 18.

⁵ Testimony of Dr. Craig R. Roach, TECO/Panda Gila River, November 12, 2002, page 27.

⁶ Direct Testimony, Reliant Resources, Curtis L. Kebler, November 12, 2002, page 16.

1 **Q. Mr. Robert Kendall suggests that the competitive solicitation process is an ideal**
2 **mechanism to use to identify any generation solutions that could help resolve local**
3 **transmission import constraints and associated RMR conditions.⁷ Does Staff agree?**

4 A. Yes, Staff agrees with Mr. Kendall on this point. In fact, his reference to Track A
5 Decision No. 65154 ordering that APS and TEP work with Staff to develop a study plan
6 to resolve RMR generation concerns and include the resulting plans in the 2004 Biennial
7 Transmission Assessment is on point. Including RMR capacity and energy as contestable
8 load in the 2003 competitive solicitation will offer a market response reference for Staff
9 regarding the relative economic and environmental merits of generation solutions to the
10 transmission import constraint. Such a comparison is most important before finalizing the
11 ten-year RMR study plan results to be incorporated into the 2004 Biennial Transmission
12 Assessment.

13
14 **TREATMENT OF RMR IN CONTESTIBLE LOAD DETERMINATION**

15 **Q. How does Staff propose RMR capacity and energy be handled in the contestable**
16 **load determination?**

17 A. Staff recommends that APS and TEP RMR capacity and energy be added to the
18 contestable load tables provided at page 7 of the Track B Staff Report.

19
20 **Q. How does Staff propose to determine what quantity of APS and TEP RMR capacity**
21 **and energy should be included in Staff's definition of contestable load for the 2003**
22 **competitive solicitation?**

23 A. Staff agrees with Mr. Ewen that his metro Phoenix RMR figures should serve as a place
24 holder until completion of the RMR study to be filed with the Commission by January 31, 2003.⁸
25 The capacity need identified as "RMR Need" and the energy identified as "Total Energy" in Mr.
26 Ewen's Metro Phoenix Reliability Must Run Estimates should be used for this purpose.⁹ Staff's
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28 ⁷ Direct Testimony, Welton-Mohawk Generation Facility, Robert W. Kendall, November 12, 2002, page 24.

⁸ Track B Testimony, APS, Peter M. Ewen, November 4, 2002, page 21.

⁹ Work Papers, APS Metro Phoenix Reliability Must Run Estimates, Peter M. Ewen, November 4, 2002, page 76

1 Track B contestable recommendation should include these RMR figures. As the RMR Study for
2 the Phoenix area progresses, the APS transmission import capacity and contestable RMR figures
3 should be adjusted accordingly.
4

5 In addition, APS should develop similar RMR figures for the Yuma area. Similarly, TEP
6 should develop RMR figures for the Tucson area. The basic foundation of this information, at
7 least the RMR capacity number is available from the Biennial Transmission Assessment. It is
8 Staff's opinion that such numbers should be developed early in the required RMR study effort
9 and should be added to the contestable load quantities approved by the Commission in Track B.
10

11 **Q. How does Staff recommend RMR conditions should be administered?**

12 A. Staff recommends that APS and TEP should administer RMR conditions in accordance
13 with applicable Arizona Independent Scheduling Administrator (AzISA) or WestConnect
14 protocol approved by FERC.
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16 **Q. Does that conclude your testimony?**

17 A. Yes.
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